## 464 Mr. Ch. C. Babington on Primula vulgaris.

The designation of Hapalogenys\* was contrived to express the velvety softness of the chin and lower lip, which is made more conspicuous by contrast with the rigidly rough scales that cover the rest of the head. A greater development of the fine tender papillæ of the under lip produces the beards of Pogonias-a genus having seven gill-rays and no recumbent spine before the dorsal. The Pogonias nigripinnis however of the 'Fauna Japonica' has only six gill-rays, a recumbent spine, three pores on each limb of the lower jaw, and in fact stands in the same relation to Hapalogenus that Pogonias does to Micropogon, the relative development of the beards being the chief difference. The Coius polota of Buchanan-Hamilton and Coius binotatus of Gray are similar forms, but an actual examination of specimens is required to determine whether they ought to be referred, as in the 'Flora Japonica,' to Anoplus or to Hapalogenys.

The general form of *Hapalogenys* and its recumbent pre-dorsal spine show some analogy to the *Squamipennes*, and bring it near to *Scorpis*, but the vertical fins are not so fully enveloped in scales, and the dentition removes it far from the *Chatodontida*.

## LIV.—On a Monstrosity of the Pistil in Primula vulgaris. By CHARLES C. BABINGTON, M.A., F.L.S., F.G.S. &c.†

THE curious monstrosity represented by the annexed rude sketch has just been sent to me by Mr. J. H. Walton of St. Bees College in Cumberland. It occupies the place of the pistil, and may be described as follows :--Within the base of the corolla is situated

a small fleshy cup, from the centre of which springs a cylindrical stem capped with another shallow fleshy cup with a wavy margin. An exposed conical placenta, covered with peltate ovules, is seated in the centre of the latter cup. Thus in place of the ovary is a cup-shaped body; and the capitate stigma is replaced by a naked fleshy ovary. Flowers of the usual form and structure



were found upon the same root with two flowers possessing this curious organ. The other parts of the monstrous flower were not altered, the stamens retaining their ordinary position. It seems probable that this singular organ consists of two whorls of carpellary leaves instead of one, as is usual in *Primula*, and that the plant was not able to develope the inner whorl sufficiently to allow it to close over the ovules.

\* From άπαλός, mollis, et γένυς, mentum.

† Read before the Botanical Society of Edinburgh, April 11, 1844.